Name: ______________________________

GCSE (1 – 9)

Box Plots

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

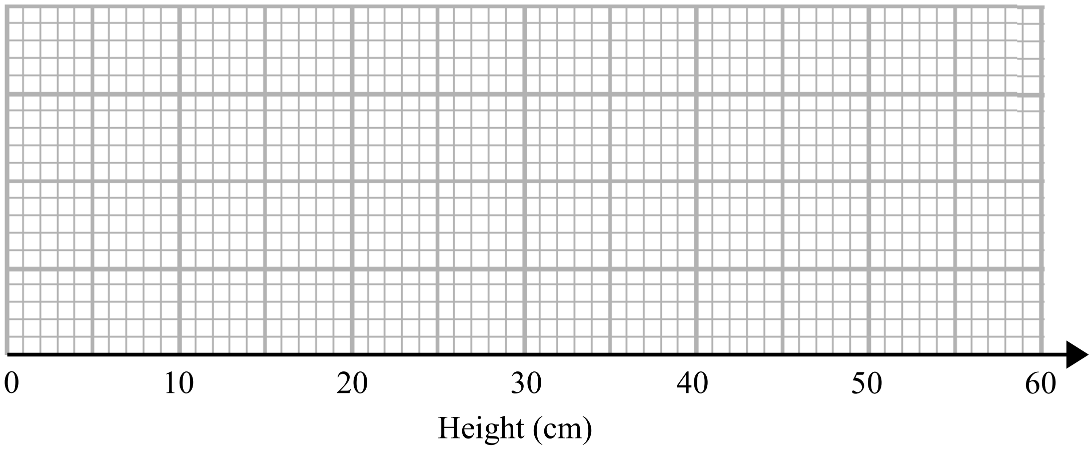
Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

1 The table shows some information about the heights, in cm, of some plants.

Minimum	Lower Quartile	Median	Upper Quartile	Maximum
11	28	37	42	51

Draw a box plot for this information.



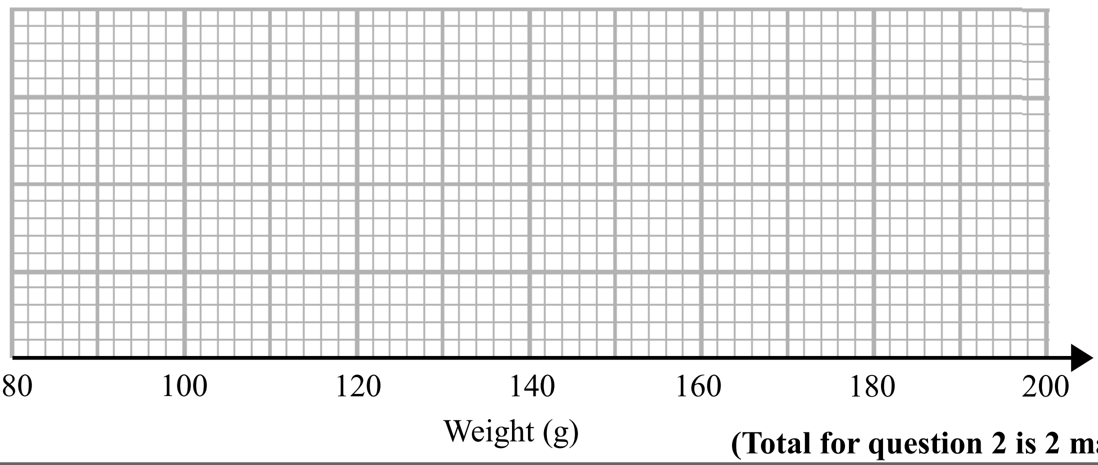
(Total for question 1 is 2 marks)

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2 The table shows some information about the weights, in grams, of some potatoes.

Range	Lower Quartile	Median	Upper Quartile	Maximum
101	110	132	162	185

Draw a box plot for this information.

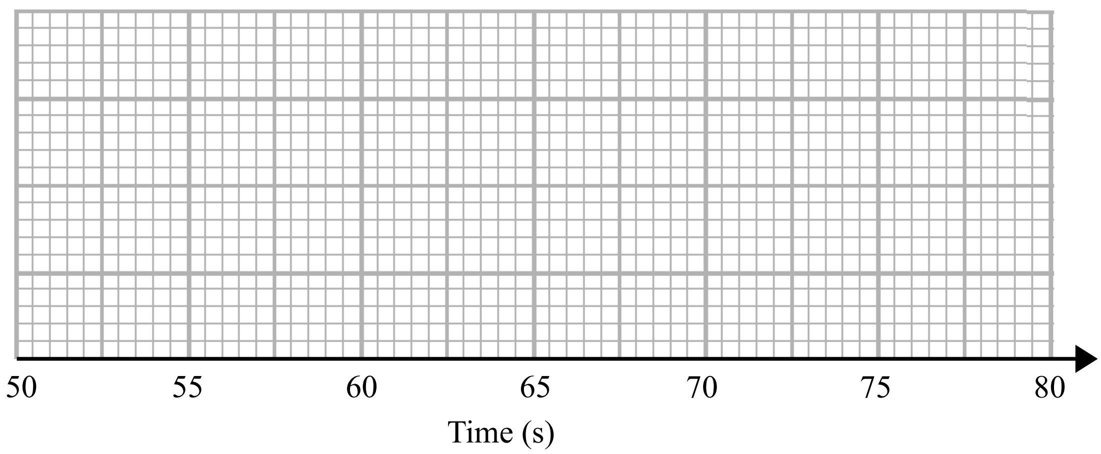


(Total for question 2 is 2 marks)

3 The times, in seconds, of 15 students running a race are recorded below.

52 54 54 55 58 58 59 60 60 61 61 64 67 70 75

Draw a box plot for this information.

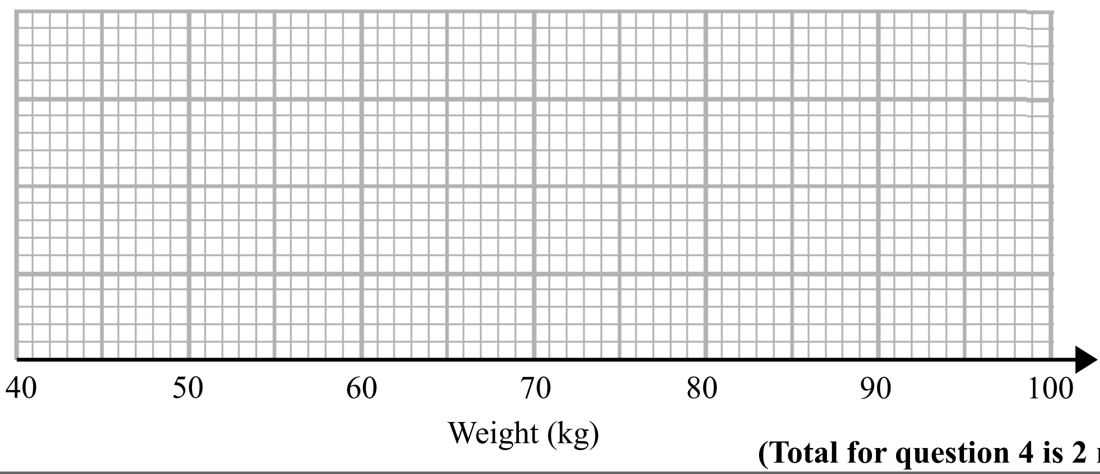


(Total for question 3 is 2 marks)

4 The weights of 11 pigs, in kg, are recorded below.

48 55 59 65 69 69 72 74 80 81 91

Draw a box plot for this information.

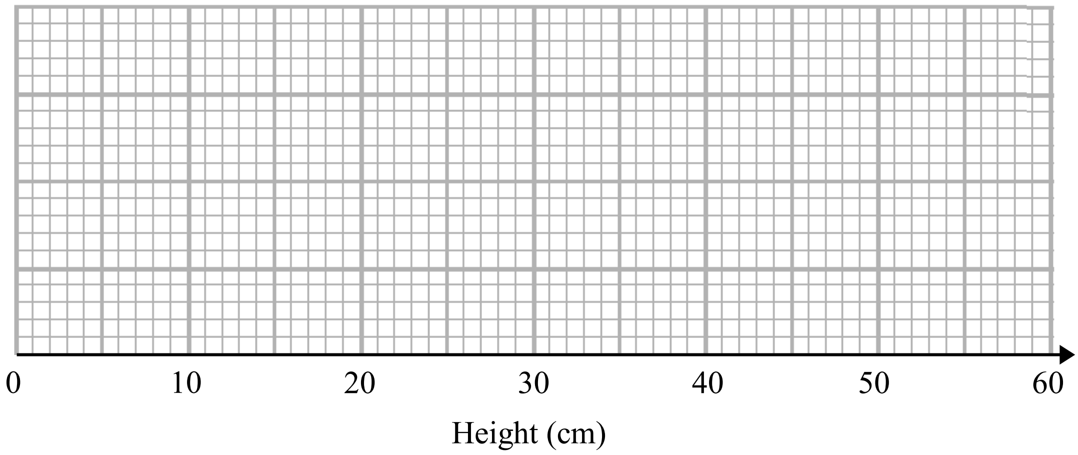


(Total for question 4 is 2 marks)

5 The table shows some information about the heights, in cm, of some tomato plants in Maggie's garden.

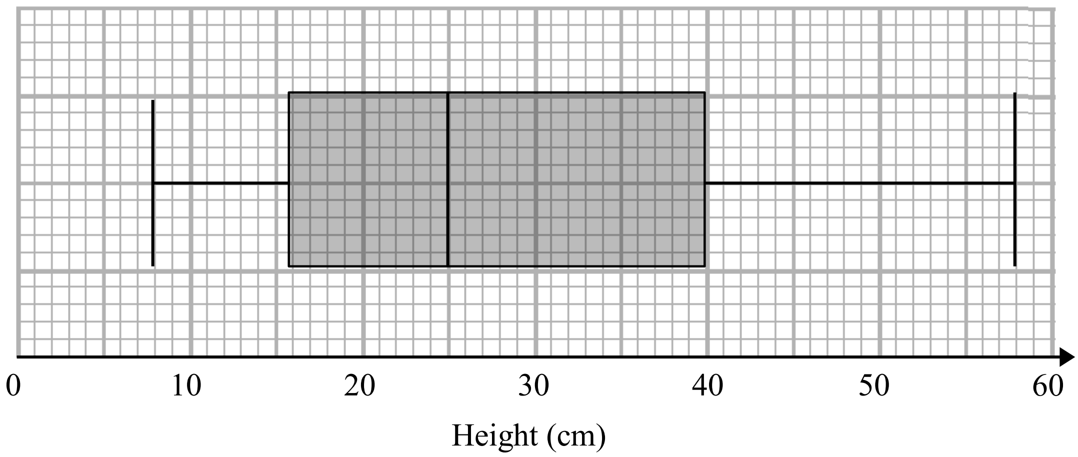
Minimum	Lower Quartile	Median	Upper Quartile	Maximum
12	27	35	42	55

(a) Draw a box plot for this information.



(2)

There are also tomato plants in Nigel's garden.
The box plot below shows the distribution of the heights of Nigel's tomato plants.



(b) Compare the distribution of the heights of Maggie's plants with the distribution of height of Nigel's plants.

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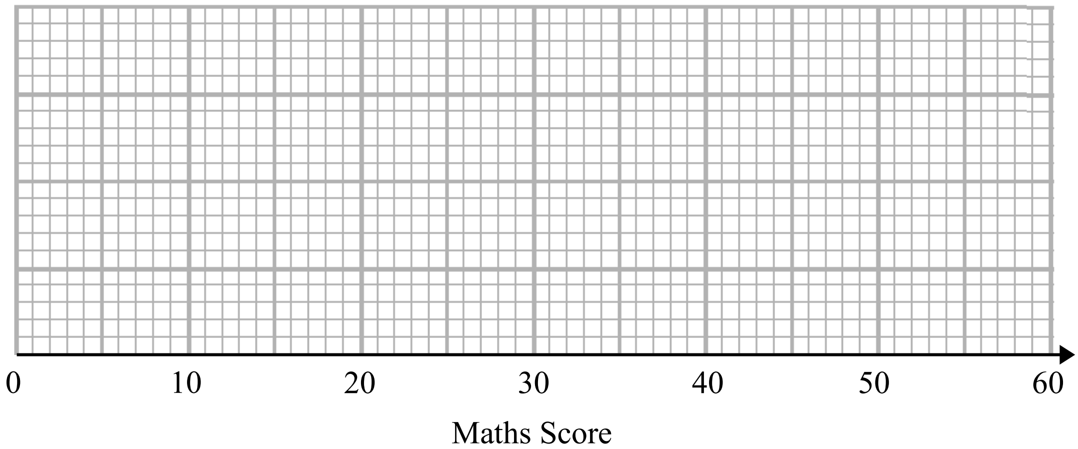
(2)

(Total for question 5 is 4 marks)

6 The table shows some information about the maths scores of students in class A.

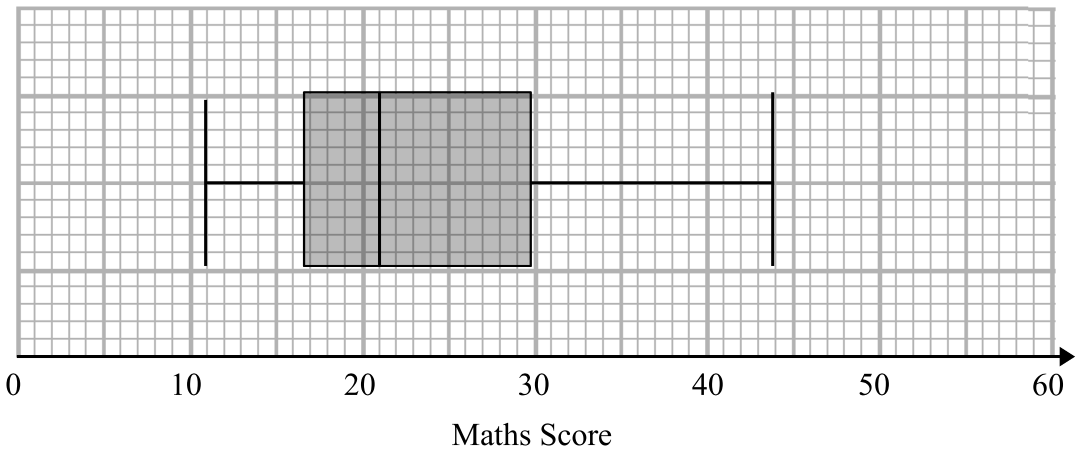
Minimum	Lower Quartile	Median	Upper Quartile	Maximum
9	15	19	31	43

(a) Draw a box plot for this information.



(2)

The box plot below shows the distribution of the maths scores of students in class B.



(b) Compare the distribution of the maths scores of students in class A and class B.

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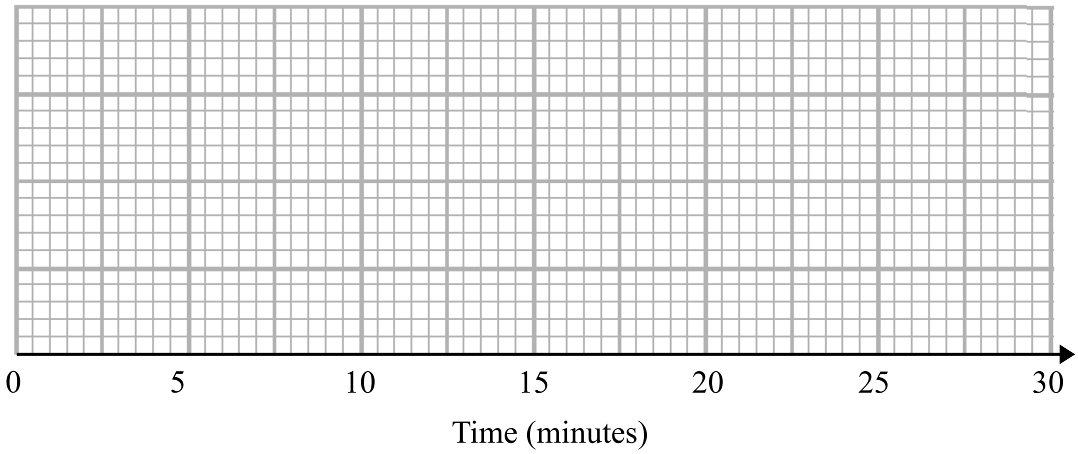
(2)

(Total for question 6 is 4 marks)

7 The table shows some information about times, in minutes, it took some boys to complete a puzzle.

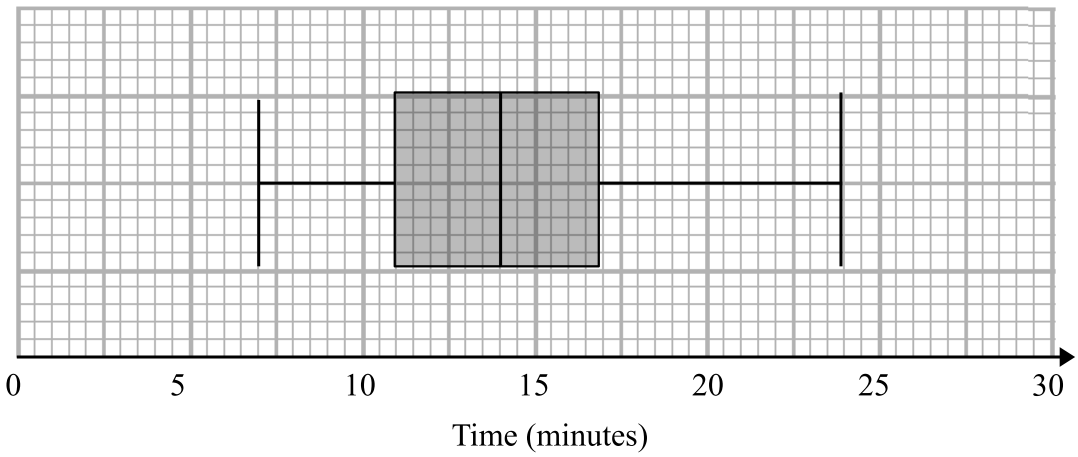
Inter Quartile Range	Minimum	Median	Upper Quartile	Maximum
8	12	18	23	29

(a) Draw a box plot for this information.



(2)

Some girls also completed the puzzle.
The box plot below shows the distribution of times the girls took to complete the puzzle.



(b) Compare the distribution of girls' times and the boys' times.

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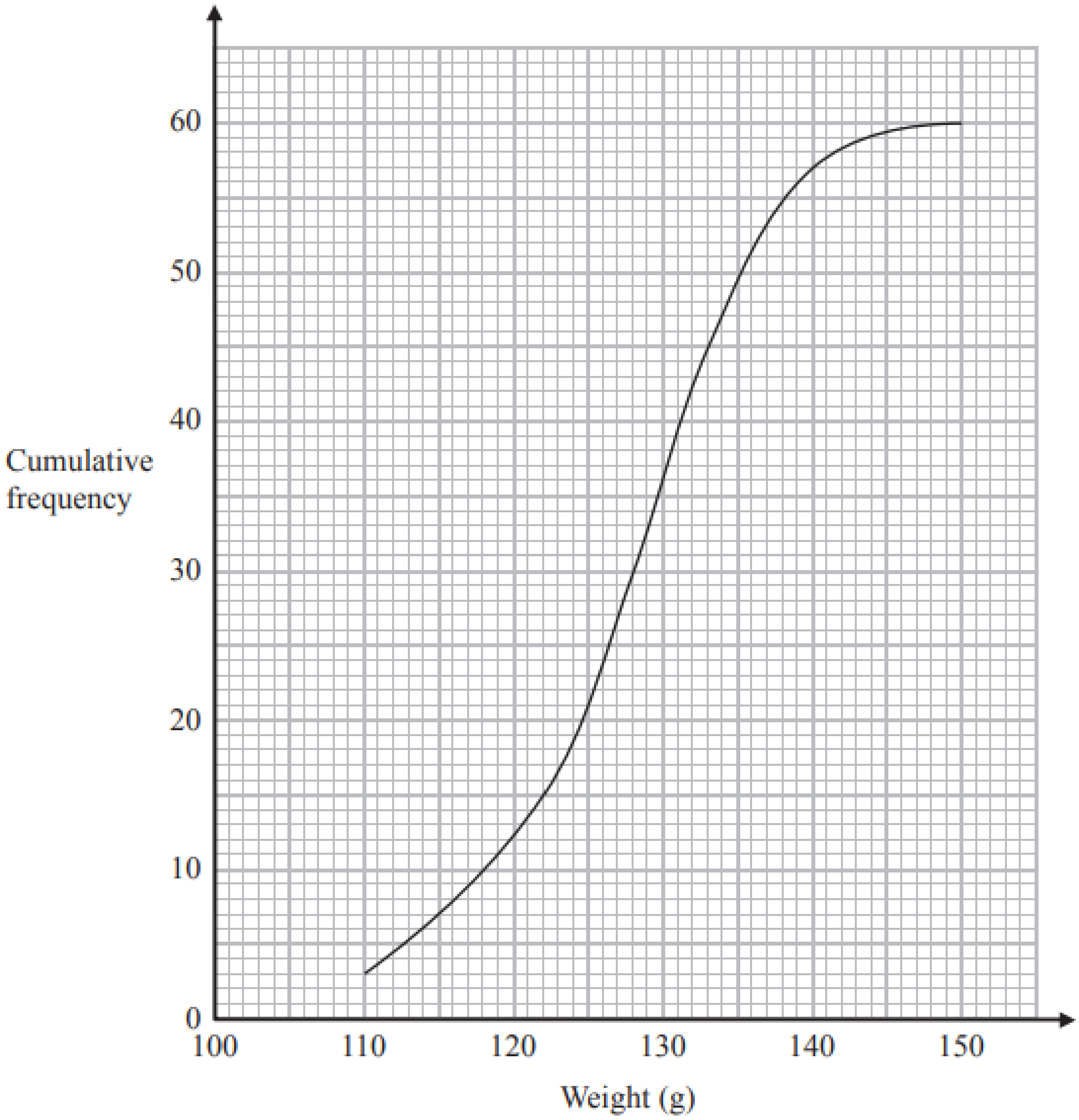
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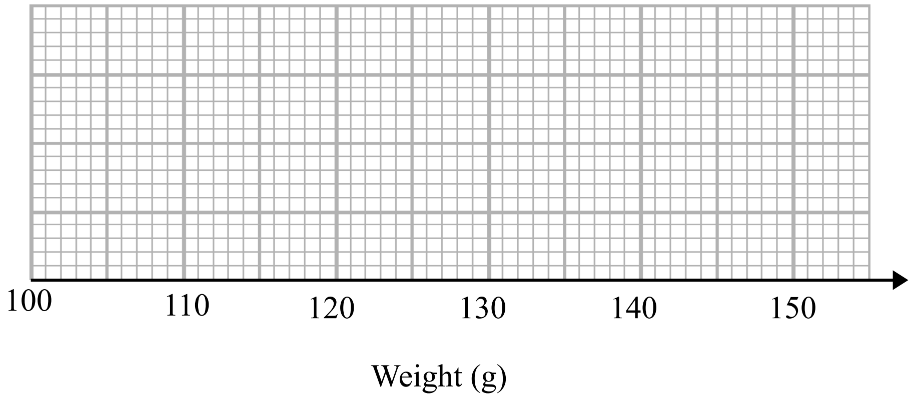
(2)

(Total for question 7 is 4 marks)

8 The cumulative frequency graph shows the weight, in grams, of 60 pears.

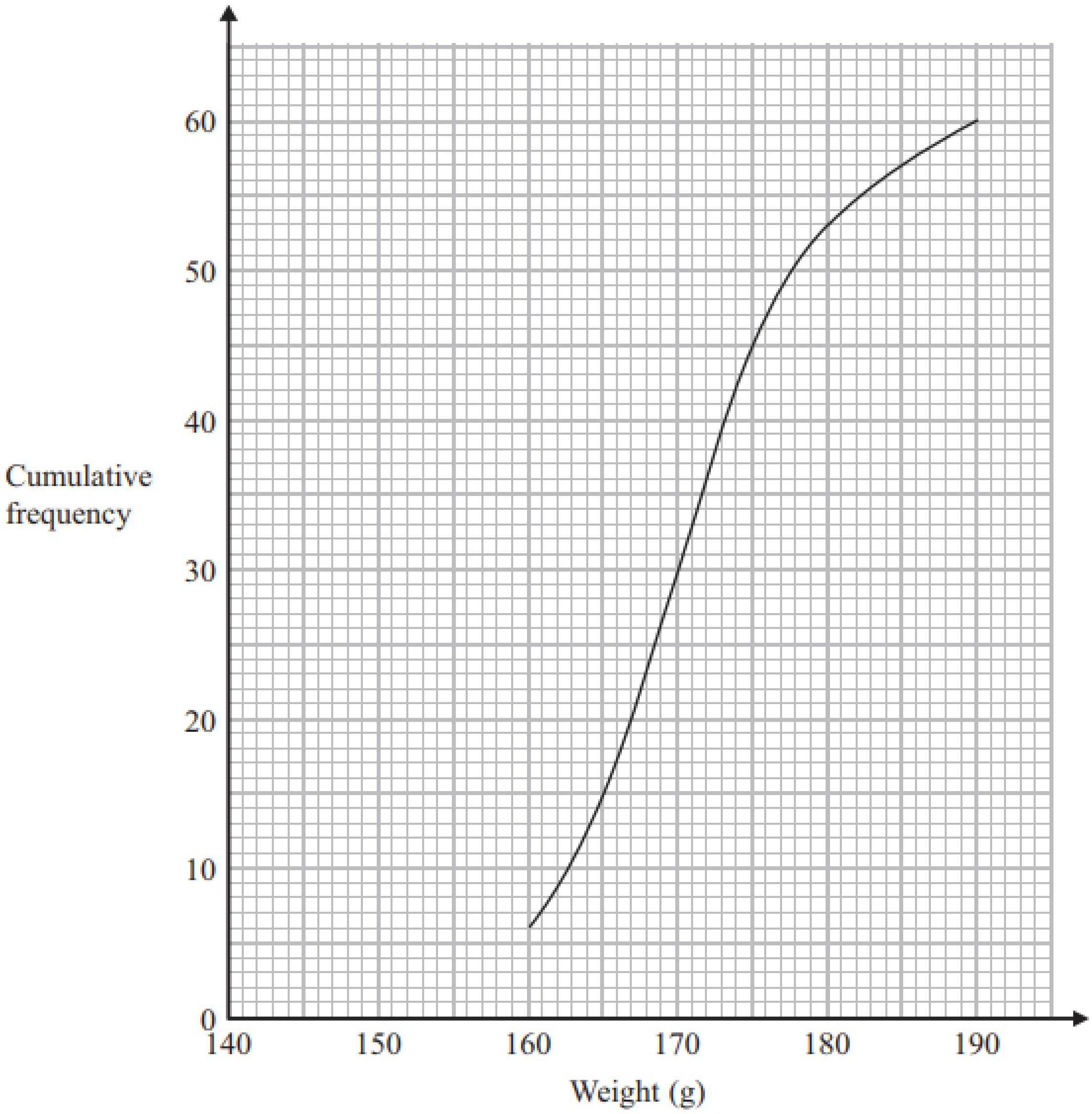


The 60 pears had a minimum weight of 112 grams and a maximum weight of 149 grams.
Draw a box plot to show the distribution of the weights of the pears.

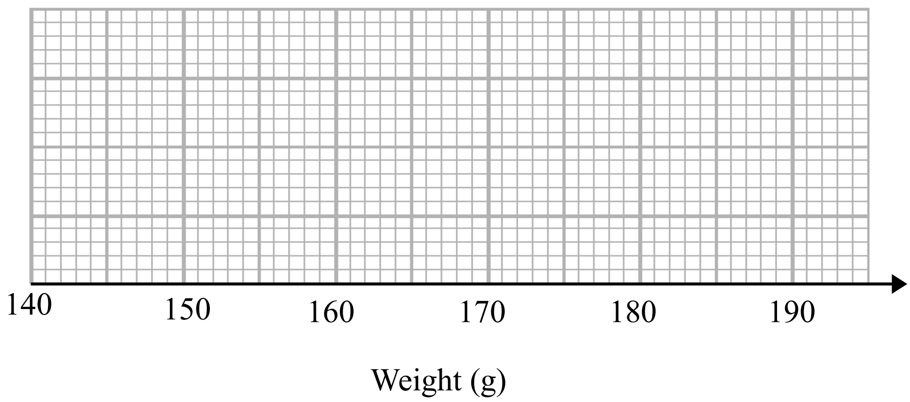


(Total for question 8 is 3 marks)

9 The cumulative frequency graph shows the weight, in grams, of 60 apples.



The apples had a minimum weight of 163 grams and a maximum weight of 188 grams.
Draw a box plot to show the distribution of the weights of the apples.



(Total for question 9 is 3 marks)